REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-20 are pending in this case. Claims 1-11 and 13-16 are amended by the present amendment without the introduction of any new matter. .

The outstanding Official Action includes a rejection of Claims 1-3, 6-8, 11-13, and 16-20 under 35 U.S.C. §103(a) as being unpatentable over Kan (U.S. Patent No. 5,355,508) in view of Venable (U.S. Patent No. 6,705,456), a rejection of Claims 4, 9, and 14 under 35 U.S.C. §103(a) as unpatentable over Kan in view of Venable in further view of Arimilli et al. (U.S. Patent No. 6,023, 746, Arimilli), a rejection of Claims 5, 10, and 15 under 35 U.S.C. §103(a) as unpatentable over Kan in view of Venable in further view of Yamagami et al. (U.S. Patent No. 6,229,954, Yamagami).

The rejection of Claims 1, 2, 6, 7, 11, 12, and 16-20 under 35 U.S.C. §103(a) as being unpatentable over Kan in view of Venable is traversed.

The top of page 4 of the outstanding Action (see lines 3-9) notes that Kan teaches an input controller 103. this controller 103 is then equated to the Claim 1 "memory controller section" based on the teaching of col. 6, lines 38-51 of Kan.

However, col. 6, lines 37-41 are clear that controller 11 in the SIMD unit 50 is what supplies instructions to input controller 103. Clearly, this SIMD unit is what has been relied on in the outstanding Action as teaching the Claim 1 required "arithmetic processing unit" that is recited as including the further claimed "programmable arithmetic processing section of SIMD (Single Instruction Multiple Data stream) type." As amended Claim 1 now recites, *inter alia*, that the "arithmetic processing unit" must also include:

> a control register section configured to receive control inputs directly
> from a control unit configured to provide the control inputs, said control unit
> being outside of said arithmetic processing unit, said control register section

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including a processing portion to provide control register section outputs based on said control inputs; and

a memory controller section configured to be responsive to the control register section outputs to control access to at least some of said addressable memory locations to control transfer of the image data portions stored thereat to said programmable arithmetic processing section depending on types of said simultaneous processing to provide said plural image data portions undergoing said simultaneous processing to provide said processed image data representing the reproduction of said original document

It is clear that there is nothing disclosed or suggested by Kan that meets these claimed requirements.

To the extent that controller 11 supplies control inputs to input controller 103, it is a controller internal to the arithmetic processing unit 50 that provides SIMD processing, not "outside" it as claimed. Also, to the extent that 103 is taught to cooperate with common memory 42, it is simply as an input through which data commanded from common memory 42 by "instructions from the system controller 11." See col. 6, lines 37-41. thus, while input controller 103 is taught as providing an input path for data from common memory 42 to pass to processing elements 108, the actual accessing of locations in common memory comes directly from the system controller 11.

Moreover, even if it could be shown that it is Kan, and not PTO assumptions, that teaches that the system controller is controlling the input controller 103 to actually access the common memory, there is still no teaching or suggestion in Kan that input controller 103 is to include any "control register section," much less one that will respond to the claimed control inputs that are received directly from a control unit that is "outside of said arithmetic processing unit."

Page 5, paragraph 8, of the outstanding Action has attempted to read the system controller 11 as the previously recited "control register section" of previously presented Claim 2. However, this interpretation fails as amended Claim 1 requires the "control register

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section" to "provide control register section outputs based on said control inputs" which control inputs must come from the external control unit.

While <u>Venable</u> scanning documents it does not correct the above noted deficiencies in <u>Kan</u>.

Claim 2 and Claims 17-20 are dependent from independent Claim 1, Thus, Claims 2 and 17-20 are also believed to be patentable for these reasons as well as for the reason that the added subject matter thereof is not taught or suggested by <u>Kan</u> and/or <u>Venable</u> taken alone or together in any proper combination.

Applicants respectfully traverse the further rejection of Claims 6-8, 11-13, and 16 under 35 U.S.C. §103(a) as unpatentable over <u>Kan</u> in view of <u>Venable</u>. In this regard, Claim 6 is an independent "means" claim with comparable limitations to those of Claim 1. Similarly, Claim 11 is a method claim reciting steps comparable to the limitations of Claim 1. Accordingly, Claims 6 and 11 are considered to patentably define over <u>Kan</u> in view of <u>Venable</u>er for the above noted reasons presented as to Claim 1 subject matter.

As Claims 7 and 8 depend on Claim 6 and as Claims 12 and 13 depend on Claim 11, these dependent claims are believed to patentably define over <u>Kan</u> in view of <u>Venable</u>er for the above noted reasons as well.

Applicants further respectfully traverse the rejection of dependent Claims 7, 8, 12, and 13 under 35 U.S.C. §103(a) as unpatentable over <u>Kan</u> in view of <u>Venable</u> because these dependent Claims 7, 8, 12, and 13 recite additional features not taught or suggested by the applied references.

Applicants respectfully traverse the rejection Claims 4, 9, and 14 under 35 U.S.C. §103(a) as unpatentable over <u>Kan</u> in view of <u>Venable</u> in further view of <u>Arimilli</u> and the rejection of Claims 5, 10, and 15 under 35 U.S.C. §103(a) as unpatentable over <u>Kan</u> in view
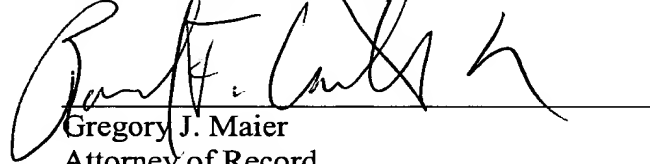
of <u>Venable</u> in further view of <u>Yamagami</u>. In this regard, neither <u>Arimilli</u> nor <u>Yamagami</u> cures the above noted deficiencies of the primary combination of <u>Kan</u> and <u>Venable</u>.

Applicants further respectfully traverse the rejection of Claims 4, 9, and 14 under 35 U.S.C. §103(a) as unpatentable over <u>Kan</u> in view of <u>Venable</u> in further view of <u>Arimilli</u> and the rejection of Claims 5, 10 and 15 under 35 U.S.C. §103(a) as unpatentable over <u>Harrell</u> in view of <u>Venable</u> and further in view of <u>Yamagami</u> because Claims 4, 5, 9, 10, 14, and 15 recite additional features not taught or suggested by the applied references.

Accordingly, the outstanding rejections are traversed and the pending claims are believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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